

GISc Certificate

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Mankato, MN 56001
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The Geography department at MSU provides a professional geographic information science (GISc). The importance of professional competency has become a major concern within the GIS community. The courses in the GISc certificate introduce the main concepts and basic principles of geographic information systems and their use in spatial analysis and, information management. They also provide a background in GIS-based spatial analysis approaches along with their capabilities, uses, and limitations. GISc certificates are available at both the undergraduate and graduate level.

Undergraduate (18-20 credits)

Required Core Courses (12 cr.)

GEOG 373 Introductory GIS (4) F, S
GEOG 473 Intermediate GIS (4) S
GEOG 474 Intro. Remote Sensing (4) F, S

Required Elective Courses - Choose Any TWO (6-8 cr.)

GEOG 439 Transportation Geography (4) F
GEOG 471 Digital Field Mapping with GPS (4) F
GEOG 475 Adv. Remote Sensing (4) S
GEOG 476 Spatial Statistics (3) S
GEOG 478 Spatial Analysis (3) SU
GEOG 479 GIS Practicum (4) SU
GEOG 480 Environmental Hazards (3) F

Graduate (18-20 credits)

Required Core Courses (12 cr.)

GEOG 573 Intermediate GIS (4) S
GEOG 574 Intro. Remote Sensing (4) F, S
GEOG 670 Issues in Geographic Techniques (4) S

Required Elective Courses - Choose Any TWO (6-8 cr.)

GEOG 539 Transportation Geography (4) F
GEOG 571 Digital Field Mapping with GPS (4) F
GEOG 575 Adv. Remote Sensing (4) S
GEOG 576 Spatial Statistics (3) S
GEOG 578 Spatial Analysis (3) SU
GEOG 579 GIS Practicum (4) SU
GEOG 580 Environmental Hazards (3) F

** Fall semester (F), Spring semester (S), Summer semester (SU)